

ABSTRACT

A secondary battery of a proton conductive polymer, wherein a positive electrode and a negative electrode are arranged facing to each other via a separator in an electrolyte and only a proton or a proton of a hydroxyl group in an indole trimer and a π conjugated polymer, i.e., an active material of electrode in the positive electrode and in the negative electrode participates in a charge/discharge, and a proton concentration is 5 to 40 % and an anion concentration is 30 to 60 % in the solution, respectively, and the anion concentration is at least higher than the proton concentration.